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I worked for the US EPA in various programs and capacities between 1980 and 2008. Between late 1989 through 1992 I managed the Lead Task Force for the Agency's Office of Drinking Water. Our work included finalizing the 1991 Lead and Copper Rule. I am a member of the Environmental Protection Network an organization of former EPA professionals which has submitted separate comments that cover different aspects of the November 2019 proposed revisions.

#### Consideration for Maximum Contaminant Level

When the current rule was established in 1991, elevated levels of lead in tap water were found in water systems with corrosive water, primarily in homes connected by lead service lines, and in homes with sources of lead outside the control of the utility -- newly installed lead solder used to connect interior copper pipes, and newly installed brass faucets (plumbing fixtures had up to 8% lead content during that period).

Data at the time indicated that in many cases lead levels at the tap would likely continue to be highly variable even after a system did everything within its control using best available technology. In considering various regulatory approaches, the Agency selected corrosion control treatment requirements as the most effective approach to limit tap water lead levels rather than a Maximum Contaminant Level (MCL), based on concern there would be no direct way to assign liability and establish the compliance status of a public water system for an MCL exceedance at the tap,

The 1991 rule was designed to identify and control high-risk scenarios, e.g., sampling was restricted to first draw samples from homes with lead solder installed after 1982 and homes with lead service lines. The proposed revision recognizes that today, sources of lead within household plumbing have largely been eliminated<sup>1</sup>, viz., sampling priorities are for homes with lead service lines.

For this same reason, the Agency should again consider establishing an MCL for lead instead of the current treatment technique approach. Given the restrictions on lead in new plumbing, the Agency's rationale in 1991 for rejecting the option to set an MCL at the tap no longer holds today. *As of 2020, it is possible that water systems can be held responsible for the sources of*

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<sup>1</sup> Lead solder was banned in the U.S. in 1986, and as of 2014 The Reduction of Lead in Drinking Water Act prohibits plumbing products used for potable water that are not lead-free (<0.25% lead content).

*lead contamination in drinking water, specifically, corrosive water interacting with lead service lines.*

Under an MCL approach, implementation and oversight would be significantly streamlined compared to the current rule and the proposed revisions, while continuing to provide comprehensive public health protection:

#### Streamlined Implementation

- Sampling would be focused on homes or other accessible sites with lead service lines
- Priority should be given to locations more distant from treatment facilities to insure that corrosion control is being maintained throughout the system
- The MCL could be established as either a single data point or as a statistical value similar to the action level (e.g., 90<sup>th</sup> percentile above 10 ppb)
- Exceedance of the MCL would put the burden on the water system to:
  - install/improve corrosion control immediately
  - continue regular monitoring at high risk sites
  - inform the public of the exceedance and how to mitigate their own exposures, and offer assistance in replacing lead service lines
  - demonstrate (within a fixed time period) that the exceedance is not under their control (i.e., 100% of all lead service lines are privately owned)
- As long as the MCL exceedance persists (e.g., measured on a calendar year basis), the water system would have to replace 7% of their lead service lines every year

#### Streamlined Oversight

- Water systems would be responsible for meeting the MCL
  - States (or EPA) would not need to review corrosion control studies or make decisions on corrosion control treatment options
  - States can prioritize enforcement based on exceedance metrics (e.g., lead levels, duration)
  - EPA can reduce regulatory specifications related to corrosion control, eliminating potential for confusion
  - Eliminates uncertainties about compliance obligations and variability in enforcement/oversight capabilities in different states

The complexity in both the current rule - however necessary at the time - and the recent proposal creates potential for confusion and delays in implementation. Many of us scientists, engineers, and policymakers who worked hard on protecting the public from lead recognize and applaud the Agency staff and state programs in the significant reductions in lead levels in drinking water over the past several decades since the current rule was issued. However, the gaps in oversight demonstrated in Newark, NJ and Flint also must be recognized. The SAB and EPA should fully review the option presented here as a way to fill these gaps.

Thanks for the work you do – Jeff Cohen